

Patent Claims

1. A polypeptide isolated from *H. medicinalis* having a molecular weight of about 12 000 \pm 1kD with the biological activity of an inhibitor of collagen-dependent platelet adhesion.
2. A polypeptide of claim 1 having an isoelectric point of pH 3.7 \pm 0.5 ⁻¹⁰³
3. A polypeptide of claim 1 or 2 having ~~at~~ cysteine molecules capable of forming -S-S- bridges
4. A polypeptide of claim 1 which comprises an amino acid sequences of SEQ. ID. NO. 1
5. A polypeptide comprising an amino acid sequence according to claim 4 which is at least 80% identical to the amino acid sequence of SEQ. ID. NO. 1 over its entire length.
6. An isolated polynucleotide encoding a polypeptide of claims 1-5.
7. An isolated polynucleotide comprising a DNA sequence of SEQ. ID. NO. 2, or a DNA sequence complementary to said DNA sequence wherein said polynucleotide is encoding a polypeptide of claim 1-5.
8. The polynucleotide of claim 7 wherein said polynucleotide comprises a DNA sequence that is at least 80% identical to that of SEQ ID NO: 1 over its entire length.
9. An expression vector comprising a ~~DNA~~ sequence of claims 6-8.
10. A host cell comprising the expression vector of claim 9.
11. An expression system comprising a host cell of claim 10.

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12. A process for producing a polypeptide of claims 1-5 comprising a host of claim 10 culturing said host under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture supernatant or cell residue.

13. An antibody immunospecific for a polypeptide of claims 1-5.

14. A pharmaceutical formulation which comprises a polypeptide according to claims 1-5 and a pharmaceutical acceptable carrier or excipient therefore.

15. A pharmaceutical active agent of claim 14 for the treatment of thromboembolic processes

16. A pharmaceutical formulation of claims 14 or 15 comprising additional drugs wherein the additional drug is selected from aspirin, heparin or streptokinase or a combination thereof.

17. Use of a polypeptide according to claims 1-5 for the manufacture of a medicament for the treatment of thromboembolic diseases.

18. Use of a polypeptide according to claims 1-5 for coating artificial surfaces.

19. Use of a polypeptide according to claims 1-5 for modifying intraocular lenses in order to lessen the thrombogenicity of the lens material.

20. Use of a polypeptide according to claims 1-5 for contacting the lens surface

21. Use of a polypeptide according to claims 1-5 for covalent crosslinking to modify said lens material.

22. Use of antibodies according to claim 13 and polypeptide according to claim 1-5 to measure samples derived from claim 12 or a treated subject.

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23. A method for identifying compounds which inhibit (antagonize) or agonize the polypeptide of claim 1 -5 by observing the binding, or stimulation or inhibition of a functional response.

5 24. An agonist identified by the method of claim 23.

25. An antagonist identified by the method of claim 23.

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